

Notice of Allowability

Application No.

09/819,382

Examiner

Phuong Phu

Applicant(s)

SAKURAI, KIYOSHI

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the election filed on 12/17/04.
2. ☒ The allowed claim(s) is/are 1-7,14-21,23,24,26,27 and 29-33.
3. ☒ The drawings filed on 28 March 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 3/28/01&3/20/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

REASONS FOR ALLOWANCE

1. This Office Action is responsive to the Election filed on 12/17/04.
2. Claims 1-7, 14-21, 23, 24, 26, 27 and 29-33 are allowed.
3. The following is an examiner's statement of reasons for allowance:

References 4551856, 6519305, 5847612, 5179729, 5311318 and 6411660 are cited because they are pertinent to the claimed invention.

-Regarding to independent claims 1, 14, 21, 23, 24, 26, 27 and 29, none of prior art of record teaches or suggests a method and associated system wherein the method/system comprises procedures/devices of generating a base band signal based on a first local oscillation signal and an angle modulation signal; generating an intermediate frequency signal based on a second local oscillation signal and said base band signal; generating said second local oscillation signal whose frequency is substantially equal to a difference between or a sum of a predetermined intermediate frequency signal and an offset frequency of a predetermined range by frequency-dividing a reference oscillation signal by a predetermined first frequency dividing ratio; and generating said first local oscillation signal whose frequency is substantially equal to a sum of or a difference between a carrier frequency of said angle modulation signal and said offset frequency by generating a signal whose frequency converges to a frequency having a given ratio to a frequency of said reference oscillation signal, in associated and/or combinations with other limitations recited in the claims.

-Regarding to claims 30-33, none of prior art of record teaches or suggests a method and associated system wherein the method/system comprises procedures/devices of generating a first base band signal based on a first local oscillation signal and an angle modulation signal,

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generating a second base band signal based on a first phase signal and an angle modulation signal, the first phase signal being different from the first local oscillation signal substantially by 90 degrees; generating an intermediate frequency signal based on a second local oscillation signal and said first and second base band signals; generating said second local oscillation signal whose frequency is substantially equal to a difference between or a sum of a predetermined intermediate frequency signal and an offset frequency of a predetermined range; and generating said first local oscillation signal whose frequency is substantially equal to a sum of or a difference between a carrier frequency of an angle modulation signal and said offset frequency, in associated and/or combinations with other limitations recited in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 571-272-3009. The examiner can normally be reached on M-F (6:30-2:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuong phu
Phuong Phu
05/06/05

PHUONG PHU
PRIMARY EXAMINER

Phuong Phu
Primary Examiner
Art Unit 2631